

IN THE CLAIMS:

Please amend the pending claims to read as follows:

1. (Original) Implant for compensating for pathological changes in the spinal column or locomotor system comprising a varnish-like biodegradable polymer coating of a thickness of 100  $\mu\text{m}$  or less, wherein the varnish-like biodegradable polymer covers a body having substantially constant physiochemical state under physiological conditions in vivo.

2. (Original) Implant of claim 1 wherein the implant is a fracture-fixation or endoprosthetic device.

3. (Original) Implant of claim 2 wherein the fracture-fixation device is selected from the group consisting of a plate, screw, nail, pin, wire, thread, and cage.

4. (Original) Implant of claim 1 wherein the varnish-like coating has a thickness of 50  $\mu\text{m}$  or less.

5. (Original) Implant of claim 4 wherein the varnish-like coating has a thickness of 10 to 30  $\mu\text{m}$ .

6. (Original) Implant of claim 1 wherein the polymer has a glass transition temperature of more than 37°C (98.6°F).

7. (Original) Implant of claim 1 wherein the polymer has a mean molecular weight of 100 kDa or less.

8. (Original) Implant of claim 1 wherein the polymer is selected from the group consisting of poly- $\gamma$  hydroxy acids, polyglycols, polytyrosine carbonates, starch, gelatins, cellulose, and blends and interpolymers thereof.

9. (Original) Implant of claim 8 wherein the polymer includes poly- $\gamma$  hydroxy acids that are selected from the group consisting of polylactides, polyglycol acids, and interpolymers thereof.

10. (Original) Implant of claim 1 wherein the varnish-like coating contains a pharmaceutically active additive.

11. (Original) Implant of claim 10 wherein the pharmaceutically active additive includes an osteoinductive substance.

12. (Original) Implant of claim 11 wherein the osteoinductive substance contains a growth factor.

13. (Original) Implant of claim 12 wherein a growth-factor percentage of a total weight of the coating is 0.1 to 10% by weight.

14. (Original) Implant of claim 13 wherein the growth-factor percentage of the total weight is 0.5 to 8% by weight.

15. (Original) Implant of claim 14 wherein the growth-factor percentage of the total weight is 1 to 5% by weight.

16. (Original) Implant of claim 12 wherein the growth factor includes at least one of IGF, TGF, FGF, EGF, BMP, and PDGF.

17. (Original) Implant of claim 12 wherein the growth factor is IGF-I or TGF- $\beta$ .

18. (Original) Implant of claim 12 wherein the growth factor is a mixture of IGF-I and TGF- $\beta$ .

19. (Original) Implant of claim 18 wherein the coating contains about 5% by weight of IGF-I and 1% by weight of TGF- $\beta$ 1.

20. (Original) Implant of claim 1 wherein the coating contains at least two layers of the biodegradable polymer.

21. (Currently Amended) Method for making the implant of claim 1 comprising:
- a. Preparing a dispersion of the biodegradable polymer in an organic solvent;
  - b. Applying the dispersion on ~~the implant surface~~ a surface of the implant to be coated; and
  - c. Allowing the solvent to evaporate.
22. (Original) Method of claim 21 wherein the application and evaporation occur at a temperature between 0 and 30°C (32 - 86°F).
23. (Original) Method of claim 21 wherein the evaporation of the solvent occurs in a gaseous atmosphere substantially saturated with solvent vapor.
24. (Original) Method of claim 21 wherein the application of the dispersion and the evaporation of the solvent are repeated at least two times.
25. (Original) Method of claim 21 wherein the dispersion is a colloidal solution of the polymer in the solvent.
26. (Original) Method of claim 25 wherein the colloidal solution is produced by allowing a mixture of polymer and solvent to stand for 1 minute to 24 hours.
27. (Original) Method of claim 25 wherein the colloidal solution is filtered prior to its application.
28. (Original) Method of claim 27 wherein the colloidal solution is filtered through a micropore filter with a pore size of 0.45 µm or smaller.
29. (Original) Method of claim 21 wherein ethyl acetate or chloroform is used as the solvent.

30. (Original) Method of claim 21 wherein the dispersion contains 20 to 300 mg of polymer per ml of solvent.

31. (Currently Amended) Orthopaedic implant of claim 1 ~~having a varnish-like biodegradable polymer coating of a thickness of 100 µm or less~~, the implant made by:

- a. Preparing a dispersion of the biodegradable polymer in an organic solvent;
- b. Applying the dispersion on ~~the implant surface~~ a surface of the implant to be coated; and
- c. Allowing the solvent to evaporate.

32 (New) An orthopedic implant having a fixed contour for placement adjacent bone, the implant comprising:

a metallic body defining a periphery, the periphery generally corresponding with the fixed contour of the implant; and

an abrasion-resistant, biodegradable polymer deposition on the periphery, wherein the deposition has a thickness of 100 µm or less, and at least a portion of the polymer deposition is adapted to contact bone when the implant is placed adjacent bone.

33. (New) The implant of claim 32, wherein the deposition has a thickness of 50 µm or less.

34. (New) The implant of claim 33, wherein the deposition has a thickness of 10 to 30 µm.

35. (New) The implant of claim 34, wherein the polymer has a glass transition temperature of more than 37°C (98.6°F).

36. (New) The implant of claim 32, wherein the polymer has a mean molecular weight of 100 kDa or less.

37. (New) The implant of claim 32, wherein the polymer is selected from the group consisting of poly- $\gamma$  hydroxy acids, polyglycols, polytyrosine carbonates, starch, gelatins, cellulose, and blends and interpolymers thereof.

38. (New) The implant of claim 37, wherein the polymer includes poly- $\gamma$  hydroxy acids that are selected from the group consisting of polylactides, polyglycol acids, and interpolymers thereof.

39. (New) The implant of claim 32, wherein the polymer deposition comprises a substantially amorphous polymer structure.

40. (New) The implant of claim 33, wherein the polymer deposition comprises pharmaceutically active agents.

41. (New) The implant of claim 32, wherein the implant is a fracture fixation device.

42. (New) The implant of claim 33, wherein the implant comprises a bone fastener.

43. (New) The implant of claim 34, wherein the implant is a screw.

44. (New) The implant of claim 34, wherein the implant is a pin.

45. (New) The implant of claim 34, wherein the implant is a nail.

46. (New) The implant of claim 34, wherein the implant is a wire.

47. (New) The implant of claim 33, wherein the implant is a plate.

48. (New) The implant of claim 33, wherein the implant is a cage.

49. (New) The implant of claim 32, wherein the implant comprises a endoprosthesis device.

50. (New) The implant of claim 49, wherein the implant is a substitute part for a joint.

51. (New) The implant of claim 49, wherein the implant is a substitute for a bone section.

52. (New) The implant of claim 49, wherein the implant is a substitute for a tooth.

53. (New) The implant of claim 32, wherein the metallic component is steel.

54. (New) The implant of claim 53, wherein the metallic component is stainless steel.

55. (New) The implant of claim 32, wherein the metallic component is titanium.

56. (New) The implant of claim 32, wherein metallic component comprises titanium and steel.

57. (New) An orthopedic implant having a fixed contour for placement proximate to bone, the implant comprising:

a body defining a periphery, the periphery generally corresponding with the fixed contour of the implant; and

an abrasion-resistant, biodegradable polymer deposition on the body,

wherein the deposition has a thickness of 100  $\mu\text{m}$  or less, and at least a portion of the polymer deposition is adapted to contact bone when the implant is placed proximate to bone.

58. (New) The implant of claim 57, wherein the periphery has substantially constant physiochemical state under physiological conditions in vivo

59. (New) An orthopedic implant for placement proximate to bone comprising:  
a member, and  
an abrasion-resistant, biodegradable polymer deposition on the member,  
wherein the deposition has a thickness of 100  $\mu\text{m}$  or less and at least a portion of the polymer deposition comprises an osteoinductive substance adapted to promote osteosynthesis when the implant is placed proximate to bone.